

GRAPHIC ENGINE FOR APPROXIMATING A QUADRATIC BEZIER CURVE IN A RESOURCE-CONSTRAINED DEVICE

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ABSTRACT

A method for approximating a quadratic Bezier curve represented by a first anchor point, a control point, and a second anchor point includes determining a flatness of a line formed between the first anchor point and the second anchor point. The flatness is a first quotient of (1) a first triangular area formed by the first anchor point, the control point, and the second anchor point divided by (2) a first distance between the first anchor point and the second anchor point. If the flatness is less than a threshold, the method further includes replacing the quadratic Bezier curve with an edge between the first anchor point and the second anchor point.